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EXAMINER

CONLEY, SEAN EVERETT

ART UNIT PAPER NUMBER

1744

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,225

Applicant(s)

BECKMAN, HANS

Examiner

Sean E. Conley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☒ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/26/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 3 recites a distribution space that is arranged between the inlet opening of the house. It is unclear as to where the location of the distribution space is since the applicant has only claimed one end point that defines the distribution space. The examiner suggests that the applicant amend the claim to more clearly define the distribution space by adding a secondary location such as particle filter (21). Thus, the distribution space would clearly lie between the particle filter (21) and the inlet opening of the house.

Claim Objections

2. Claim 5 is objected to because of the following informalities: The phrase "cupper oxide" should read "copper oxide". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1-6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swann (U.S. Patent No. 5,315,987) in view of Takase et al. (U.S. Patent No. 4,572,178)

Regarding claim 1, Swann discloses a fire smoke cleansing device for personal use comprising a housing (canister (12, 112) that includes a number of inlet openings (20, 120) arranged over an end surface for a gaseous medium to enter the housing. Inside the housing (12, 112) is a filter space containing a particle filter (42, 142), a filter mass (36) comprising activated carbon for the elimination of acidic gases, and a catalyst (40) for the oxidation of carbon monoxide to carbon dioxide, preferably in that order. Furthermore, in connection with the filter space is a valve space (54, 154) comprising two one-way valves ((30, 130), (32, 132)) to provide a controlled flow of gas through the

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filter space and a bite mouth piece (28, 128) arranged in connection to the valve chamber at the opposite end of the housing (see figures 3, 5, 9B, 10; col. 7, line 62 – col. 10, line 25; col. 11, line 62 – col. 13, line 28). Swann fails to teach a rectangular oblong housing.

Although the order of the filters listed above by Swann is preferable it does not exclude other combinations (see col. 2, lines 40-45; col. 15, lines 45-51). Therefore, it would have been an obvious matter of design choice to modify the order of the filters and switch the location of the catalyst filter with the filter for eliminating acidic gases, since the applicant has not disclosed that having the specific filter orientation solves any stated problems or is for any particular purpose and it appears that the combination would perform equally as well with any suitable orientation of the catalyst filter and the filter for eliminating acidic gases.

Regarding the failure of Swann to teach rectangular oblong housing, Takase et al. disclose an emergency mask (10) comprising an air purifying canister holder (12) which contains an air purifying canister (1) that is rectangular in shape. The canister (1) includes a smoke filter (2), a desiccant (3), an adsorbent (4), and a hopkalite catalyzer (5) (see figure 1; col. 3, lines 22-46). The canister (1) and canister holder (12) are rectangular and oblong in shape (see figure 5). The oblong rectangular shape enables the air purifier to be easily stored in a rectangular bag because of its compact rectangular shape whereas in the past conventional masks cannot be folded in a flat form but only in a ball-like shape with a larger diameter making it difficult to transport

(see col. 4, lines 15-50). Furthermore, the oblong rectangular shape provides an improved field of view for the user (see col., lines 36-37).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Swann and make the filtering canister an oblong rectangular shape as taught by Takase et al. in order to provide an improved field of view for the user and also make the canister easier to store and carry in carrying bag or attaché case.

Regarding claim 2, Swann discloses a valve space (54, 154) provided with a one-way inhalation valve (30, 130) arranged to the filter space, whereby this first one-way valve controls transport of gas from the inlet openings to the bite mouth piece (28, 128), and an outlet opening having a second one-way exhalation valve (32, 132) for outgoing respiration air, whereby the second one-way valve (32, 132) prevents respiration through the outlet opening (see figures 5, 10; col. 9, line 45-col. 10, line 24; col. 13, lines 1-20)

Regarding claim 3, Swann discloses a fire smoke cleansing device that has a distribution space arranged between the inlet openings (20, 120) and the filter material (36, 136) (see figure 9B and figure 10). In figure 10, it is shown that the distribution space is formed by upstanding ribs (125) formed at the bottom of the housing to elevate the filtration section (124) from the bottom and increase exposure of the filter to air (see column 12, lines 16-25).

Regarding claims 4 and 5, Swann discloses that the catalyst for the oxidation of carbon monoxide is copper manganese oxide hopkalite (see column 8, lines 54-59).

Regarding claim 6, Swann discloses a fire smoke cleansing device that has a sound producing means (whistle (157)) connected to the valve chamber (154) and is arranged to provide a sound at exhaustion through the valve chamber (151) (see figure 10; column 6, lines 61-65; column 13, lines 17).

Regarding claim 8, Swann discloses a tightly closing package (10, 110) comprising a canister (12, 112) with a lid (18, 118) and a fire smoke cleansing device as well as other fire and smoke protection equipment such as a transparent hood (34, 134) (see figures 1, 2, and 10; col. 7, line 62 - col. 8, line 21; col. 11, line 44 - col. 13, line 10).

Regarding claim 9, Swann discloses a package that further comprises a drying agent. Specifically, canister package has a desiccant that is located in filter stage (38) for removing moisture from the air inside the fire smoke cleansing device (see col. 8, lines 50-55).

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swann as applied to claim 1 above, and further in view of Marsh (GB 2262891 A).

Swann teaches a housing that is formed of a color-impregnated plastic material (see col. 7, line 68-col. 8, line 1). However, Swann fails to specifically teach a housing provided with a fluorescent dye.

Marsh discloses an all in one facemask covering the nose and mouth comprising a filter (11) for protecting a user from breathing in dust and pollution (see page 2; figures 3-4). The facemask has a strap (12) and a design (14) which are made of fluorescent colors (a material impregnated with a fluorescent dye) so that the mask can be seen at

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night where visibility is minimal (see page 2). This reference has been relied upon to teach that it is known to make a breathing mask that is fluorescent in color so that it is visible in poorly lit conditions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Swann and include a fluorescent dye in the fire smoke filter housing as the impregnated color in order to increase the visibility of the user in a poorly lit area as taught by Marsh.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Grove et al. (U.S. Statutory Invention Registration No. H1360) teaches a gas mask and hood that can be fold up and placed into a tightly sealed package.
- Wallace (U.S. Patent No. 3,773,044) teaches the use of hopcalite to remove contaminants from the air.
- Kikuchi et al. (U.S. Patent No. 4,688,567) discloses a gas mask comprising a copper oxide and manganic oxide filter with a drying agent.
- Sponsel (U.S. Patent No. 3,381,454) teaches a copper and manganese oxide filter catalyst for a gas mask.
- Nur et al. (U.S Patent No. 5,875,775) discloses a protective mask comprising an activated charcoal filter.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Conley whose telephone number is 571-272-8414. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 9, 2005

SEC

S.E.C.


JOHN KIM
SUPERVISORY PATENT EXAMINER